

**ABSORBENT MATERIALS AND ABSORBENT ARTICLES  
INCORPORATING SUCH ABSORBENT MATERIALS**

ABSTRACT OF THE INVENTION

An absorbent material formed at least in part of a cross-linked polymer. The absorbent material has a  
5 centrifuge retention capacity as determined by a Centrifuge Retention Capacity Test of at least about 20 g/g and a gel bed permeability under load as determined by a Gel Bed Permeability Under Load Test of at least about  $200 \times 10^{-9}$  cm<sup>2</sup> or  
10 a free swell gel bed permeability as determined by a Free Swell Gel Bed Permeability Test of at least about  $2,500 \times 10^{-9}$  cm<sup>2</sup>. The cross-linked polymer may comprise either at least about 75 weight percent anionic polymer or at least about 75 weight percent cationic polymer. In one embodiment, the cross-linked polymer is surface treated with a water soluble  
15 non-cross-linked polymer having a potential for becoming charged opposite that of the cross-linked polymer.